Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SOME MYCOLOGICAL NOTES FOR 1919*

L. O. OVERHOLTS

(WITH PLATES 9 AND 10)

The fungous flora of the mountains of central Pennsylvania is perhaps as rich and as varied as in any other region of the United States. The summer of 1919 was marked by an unusual abundance of rainfall that brought forth such a crop of fungi as had not been produced since 1915. Intensive and extensive collecting over several years has added scores of hitherto unreported species to the fungous flora of the state. A considerable number of these are of rare occurrence or for other reasons are only imperfectly known. It is hoped that the present paper with the accompanying photographs will help to give these few species a more prominent place in the mycological literature of the country.

1. CLAVARIA ORNATIPES Peck

The writer has collected Clavarias in considerable abundance for several seasons past, but this is the first collection of this interesting species. The name of Peck's species *C. bicolor* (later changed to *C. vestitipes*) for a different plant, would fit this plant nicely, for the color contrast between the drab-gray branches and the wood-brown (Ridgway's colors) stem is quite marked. Persoon's name, *C. trichopus,* for a similar if not identical plant, refers to the abundant ascending gray-brown stiff hairs that clothe the stem. *C. vestitipes* Peck is a much smaller plant. *C. krombholzii* Fr. (ex Lloyd) is similar in stature and branching but uniformly white in color. The spores of my specimens are globose, smooth, hyaline under the microscope, and measure 8–10 μ in diameter. The content is quite granular.

---

* Contribution from the Department of Botany, The Pennsylvania State College, No. 22.

2. CRATERELLUS PISTILLARIS Fr.

This interesting species was collected in abundance in the Seven Mountains of Center County, on August 24. About 25 specimens were found along an old forest trail in the vicinity of Bear Meadows. Dr. Burt reports[1] but three localities in this country, viz., New Hampshire, Vermont, and Michigan for the species. Professor E. T. Harper has published[2] some excellent illustrations and given some critical notes on the species.

My plants were somewhat larger than the measurements recorded by Dr. Burt, the largest specimens being 16 cm. tall and 7 cm. thick at the apex. A few specimens were somewhat compressed and flabelliform in shape and one specimen was strongly 2-lobed at the apex. The color of the nearly smooth hymenium varied from light pinkish cinnamon to vinaceous cinnamon of Ridgway. The specimens grew in a mixed hard-wood forest, chestnut and oak predominating.

3. FOMES BAKERI (Murrill) Sacc.

Plate 9, figs. 1, 2

On species of birch in the middle-western United States there has been known for some time a *Fomes* that by most collectors was referred to *F. igniarius* Fr. In 1908, Murrill[3] described this as a new species under the above name and later reported[4] its range as "Wisconsin, Missouri, and westward." In 1915, Lloyd referred[5] this plant as a variety of *F. robustus* Karst., known in this country only from California. The writer added[6] an Ohio locality in 1915 and pointed out that while the type collection was made by C. F. Baker, yet the plant distributed under that name by him in Plants of Southern California, 5188, was a different species, probably *Polyporus gilvus.*

On the basis of these references the species was not believed to occur east of the Appalachian Mountains, and it was with considerable surprise that on November 22, 1919, a dead standing sweet birch (*Betula lenta*) was observed bearing a number of excellent sporophores of what proved to be this species. These are the largest sporophores yet seen, and some of them are more applanate than is usually the case. The largest specimen measures 13 × 20 × 5 cm. The tree that bore these sporophores was about two feet in diameter and was later felled for observations as to the characteristics of the decay produced. It was found that the fungus is a sap-wood destroying organism, although perhaps encroaching to some extent on the heart wood. But in the center of the tree there was a cylinder of the dark red, sound heartwood characteristic of this species of tree. Pieces of the log containing both sapwood and heartwood were brought into the laboratory and at the present writing the fungous mycelium has grown out over the surface of the sapwood in a brownish-olive mat, but has not appeared on the adjacent heartwood. The decayed wood has no striking characteristics but the decay appears to be of the general delignifying type, whitening the wood and rendering it brittle but not friable. This habit of being largely confined to the sapwood serves to emphasize the distinction between this species and *F. igniarius* — a heart-rotting organism.

---

[1] Ann. Mo. Bot. Gard. **1**: 342. 1914.

[2] Mycologia **5**: 263. 1913.

[3] N. Am. Flora **9**: 104. 1908.

[4] Northern Polypores, p. 48. 1914.

[5] Synopsis of the genus Fomes, p. 243. 1915.

[6] Polyporaceae of the Middle-Western United States, p. 61. 1915.

A search was then made in the herbarium material representing allied species of this fungus with the result that two additional collections were discovered, both from Pennsylvania. One was taken by Dr. A. S. Rhoads, on *Betula lutea* in Philadelphia, Pa., December 27, 1915, the other by the writer, on *Betula lenta,* February 24, 1918, in the mountains near State College. It is a curious fact that of the three Pennsylvania collections two were from trees growing on the exposed summits of mountain ridges, while in the state of Missouri the writer knew it as frequenting the birches in the lowlands along streams.

Plants of this species are not as firm and hard as is *F. igniarius,* and they lack the white incrustation found in the older layers of tubes of that species. In addition the tubes are distinctly stratified (see fig. 2) and the context has a decidedly silky luster similar to that in *Fomes everhartii.* These points serve to distinguish the species from its allies.

4. MERULIUS AUREUS Fr.

Plate 10, fig. 4

This is one of the more uncommon species of *Merulius*. An excellent collection was made October 5 on the decorticated trunk of a pitch pine (*Pinus rigida*) near State College. In these specimens the plant is largely resupinate but with a definite reflexed border in many cases. The largest specimen had a spread of 15 cm. in length and about 5 cm. in width. The color of the young plant, or the growing margins of older resupinate specimens is buff yellow or light orange yellow. The color of the reflexed pileus is close to yellow ochre and varies from finely pubescent to glabrous. The color of the hymenium is not closely matched in Ridgway's Manual, being darker than zinc orange and too bright for cinnamon rufous. Xanthine orange is probably closer. The color is quite similar to that of *Paxillus corrugatus* and the configuration of the hymenium suggests a relationship with that plant. The absence of any odor, however, immediately corrects any impression that it might be that species. This collection shows quite well that when first formed the fruiting bodies are nearly orbicular and 0.5–1.5 cm. broad. They soon become laterally confluent to the measurements given above, but even in such specimens it is often possible to trace the limits of the original sporophores, as the folds are often sub-lamellate and radially arranged from the center. The spores are oblong or short-cylindric and sometimes pointed at one end, smooth, hyaline under the microscope, and measure $3\text{–}4 \times 1.5\text{–}2\,\mu$; cystidia none. Dr. Burt states that in mass the spores of the species are somewhat yellowish, but light spore falls obtained from these specimens are colorless.

5. MUCRONELLA ULMI Peck

Plate 10, fig. 5

This peculiar plant has been found in considerable abundance for the first time since its appearance here in 1915. Its small size makes it very inconspicuous and easily overlooked. It grows on the bark on the north side of a living *Ulmus americana* tree on the campus of the Pennsylvania State College. A lavender or purplish tint has been noted on the teeth this season.

The genus *Mucronella* is characterized by short awl-shaped teeth that arise directly from the substratum without the intervention of a subiculum. It thus approaches some of the small Clavarias in habit, and some would include the genus in the *Clavariaceae*. In some species, as the present one, the teeth are not separate but are united several in a fascicle, approaching the form of a diminutive *Hydnum erinaceum* or related species.

Mr. Lloyd has recently summarized[7] our knowledge of the taxonomy of the genus. He lists five species, four of which have been reported from the United States. Two of these are now known to occur in Pennsylvania. The plants are extremely rare, however, and no other account of the species of the United States has been published. I take this opportunity, therefore, to present a photograph and a few remarks concerning the species.

The genus as originally founded was said to have one-spored basidia. I have examined my material carefully but no spores or sterigmata were seen, though young basidia were abundant. The following descriptive notes are appended:

Plants white, drying gray, composed of few or several awl-like teeth, 2–4 mm. long, united by their bases into small clusters 2–4 mm. broad and 2–5 mm. long; spores not obtained; cystidia none.

On bark of living elm trees. October.

6. PAXILLUS CORRUGATUS Atk.

A collection of this rare plant was made at Shingletown Gap, Center County, Pa., August 16, 1919, on the bark and wood of a fallen *Pinus rigida*. The species is easily recognized by the very strong odor and the corrugated gills that are near ochraceous buff (Ridgway) in color. The odor is very characteristic and unlike that of any other fungus. It has persisted until the present time in a Kentucky collection preserved in the writer's herbarium since 1909, when it was collected by Dr. Bruce Fink. Parts of the present collection were very largely resupinate.

---

[7] Mycological Notes No. 39, pp. 531–533. 1915.

The species was originally described from New York by Professor Atkinson. Kauffman also reports a station for it in Michigan.

7. POLYPORUS SCHWEINITZII Fr.

This polypore, rather common in Pennsylvania on conifers, especially species of pine, was collected near Boalsburg, Pa., on the roots of a living tree of *Quercus alba*. This is probably an unreported host for this species. The woods in which the specimen was taken is an open mature stand, consisting entirely of oaks and hickories, and there is no indication that conifers have ever been present in the wood lot.

8. PORIA SEMITINCTA Peck

This beautiful *Poria,* originally described by Peck[8] in 1879 and recently re-described by the writer, has hitherto been found, to the writer's knowledge, only in four localities in New York State. Its appearance in Pennsylvania is, therefore, of considerable interest. It was collected from the bark of an oak log, near State College, October 5, 1919. The specimens were fresh and on the young subiculum and the growing margin of nature plants the pinkish-lilac color was quite marked. This color has persisted in the dried plants up to the present time. There is also a slight "sweet-acid" odor to the fresh specimens, similar to that in *Polyporus galactinus* Berk. A few scattered cystidia are present in certain areas but often whole sections are without them. In agreement with this, they were reported by the writer as absent in the type specimens of this species but rarely present in another collection preserved at Albany. In the present collection they are 6–9 μ in diameter, project rather strongly, and are slightly incrusted. At first sight it was supposed that this collection might represent the resupinate condition of *Polyporus pargamenus* which on the growing margin is often a similar lavender or lilac color. The plants are too thin for that species, however, the spores are not allantoid but oblong or short-cylindric, the cystidia when present are different, and the hyphae of this plant are quite characteristic. No clamps are present, cross walls are abundant and conspicuous, and most of the numerous branches originate near a cross wall.

---

[8] Bull. N. Y. State Mus. 205–206, pp. 106–108. 1919.

9. TREMELLA SPARASSOIDEA Lloyd

Plate 10, fig. 3

On August 25, the writer collected a large *Tremella* on the ground in a deciduous woods near State College. It was assigned tentatively to *Tremella vesicaria* and sent to Mr. C. G. Lloyd under that name. The fungus differs from that species, however, principally in having *acute* erect and *somewhat fimbriate* lobes instead of the large blunt finger-like ones characteristic of *T. vesicaria.* Mr. Lloyd proposes to describe this as a new species as named above. The entire plant formed a mass about 15 cm. in diameter and 10 cm. high and was nearly white in color. In consistency it was more cartilaginous than gelatinous, probably in part accounted for by the dry weather of the few days previous. The basidia are of the usual longitudinally divided type, averaging about 9×12–$14\,\mu$ and with sterigmata up to $20\,\mu$ long. All stages in the development of the basidia are easily found in crushed preparations. The spores are somewhat irregular in shape, from elongate-ellipsoid to broadly inaequilaterally ellipsoid though usually narrower and sometimes slightly apiculate at one end. They measure 8–10×4.5–$6\,\mu$. A specimen is preserved in the Lloyd museum and in the Overholts Herbarium.

In 1910, Gilbert noted and figured a plant from Wisconsin[9] that I have no doubt from his photograph should be referred here. He included it as a variety of *Tremella reticulata,* a name applied by him to the plant here called *T. vesicaria.* My photograph of *T. sparassoidea* shows a striking resemblance to the one published by Gilbert.

10. TREMELLA VESICARIA Fr.

This species was collected in abundance in a grassy woodland pasture in 1915, but had not since been observed until a specimen was brought in on July 22 of this year. It is undoubtedly to be considered as a rare species although apt to be abundant in local isolated regions.

---

[9] Studies on the Tremellineae of Wisconsin. Trans. Wisc. Acad. Sci., Arts, and Let. **16**: 1137–1170. 1910.

11. TREMELLODON GELATINOSUM (Scop.) Fr.

About 25 specimens of this unique member of the *Tremellaceae* were collected by the writer on an old hemlock log in Bear Meadows, Center County, Pa., August 30, 1919. The species is apparently rather widely distributed but only rarely collected. The color of the upper surface when fresh varied from nearly white to drab or buffy brown (Ridgway). The largest specimens measured 6 × 7 cm. Another collection from New Hampshire is in the writer's herbarium. Very good illustrations are given in Hard's mushroom book, fig. 405.

12. TRICHOGLOSSUM HIRSUTUM (Pers.) Boudier

Collected in Bear Meadows, Center County, Pa., August 30, 1919. Several hundred individuals were found growing closely associated on a small area of earth, leaf mold, and rotten wood. The largest specimens were about 10 cm. tall and in some the ascigerous portion was somewhat convoluted. The stem and hymenium is beset with a multitude of spines that give a velvety appearance and feeling to the plant. The spores were uniformly 15-septate as described by Durand and measured 130–140 × 5–6 μ.

STATE COLLEGE, PA.

EXPLANATION OF PLATES

PLATE 9

Fig. 1. View of upper surface of a rather young sporophore of *Fomes bakeri*. × ½. In age the pileus may become considerably rimose. Overholts Herb. No. 5529. Photo by E. T. Kirk.

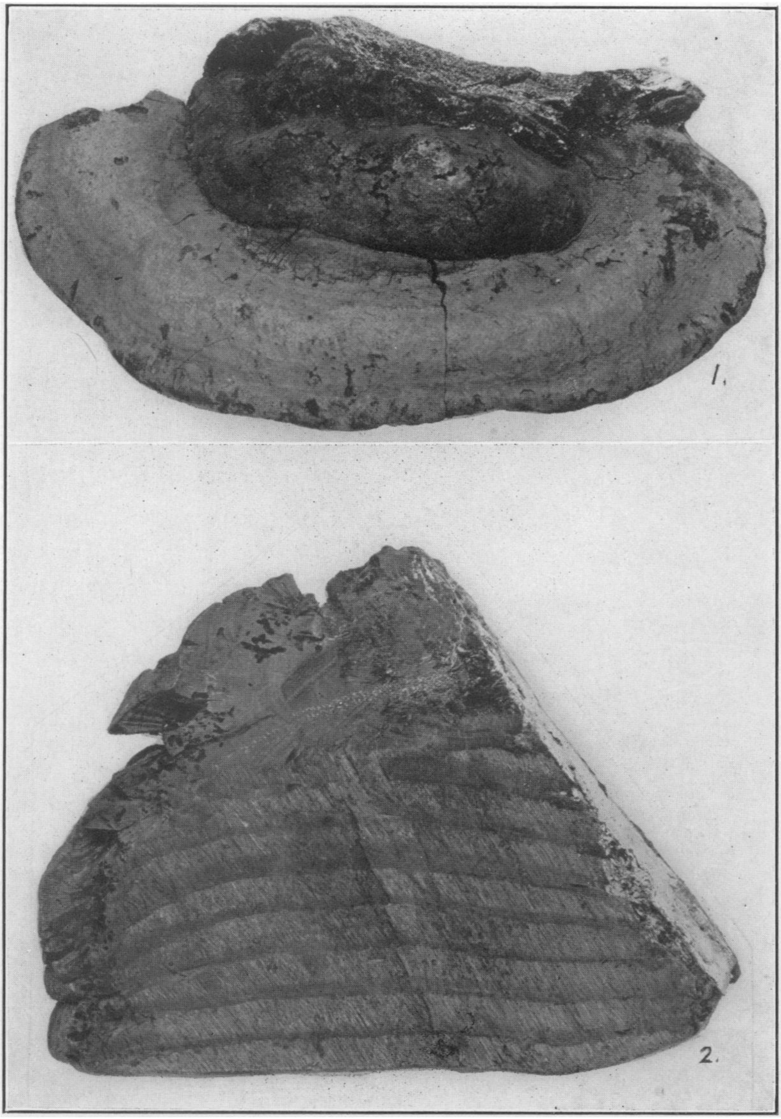
Fig. 2. Lateral view of a vertical section through a perennial sporophore. × 1. Note the conspicuous context and the marked layering of the tubes. Overholts Herb. No. 4174. Photo by E. T. Kirk.

PLATE 10

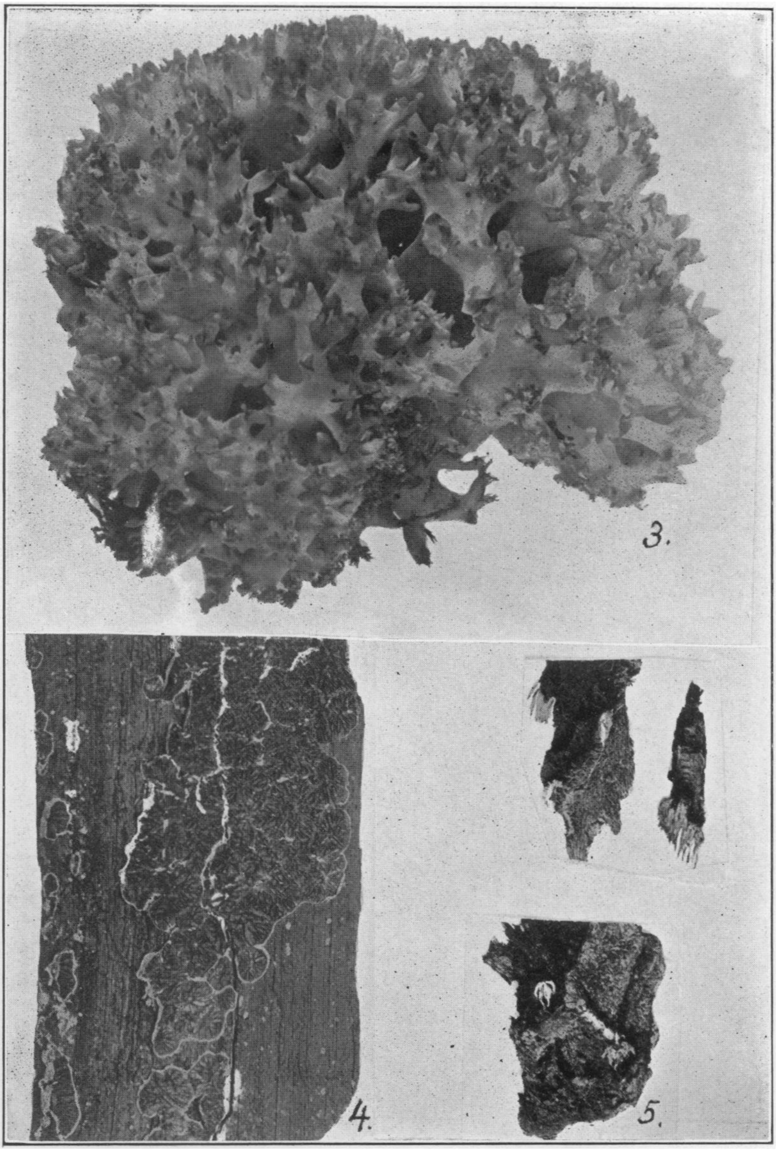
Fig. 3. *Tremella sparassoidea*. View, from above, of the entire plant. × ¾. Type collection, Overholts Herb. No. 5407. Photo by the writer.

Fig. 4. *Merulius aureus*. Specimens largely resupinate. × 1. Overholts Herb. No. 5455. Photo by E. T. Kirk.

Fig. 5. *Mucronella ulmi*. Specimens from bark of living *Ulmus americana*. × 1½. Overholts Herb. No. 3169. Photo by the writer.



FOMES BAKERI (MURRILL) SACC.



3. TREMELLA SPARASSOIDEA LLOYD
4. MERULIUS AUREUS FRIES
5. MUCRONELLA ULMI PECK